Our Case No. 13097/3

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

John S. Lollar

Serial No. 10/813,507

Filing Date: March 30, 2004

For: NUCLEIC ACID AND AMINO ACID SEQUENCES ENCODING HIGH LEVEL EXPRESSOR FACTOR

Examiner: Gibbs, Terra C.

Group Art Unit No. 1635

RESPONSE TO NOTICE TO COMPLY WITH THE SEQUENCE RULES

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In reply to the Notice to Comply with the Sequence Rules dated January 19, 2007, assignee provides this Response. Applicants respectfully request that the Examiner withdraw the objections to this application and to grant allowance of this application in view of the following amendments and remarks.

Amendments to the Specification begin on page 2 of this paper.

Remarks begin on page 3 of this paper.

In the Specification:

Please replace paragraph [0121] with the following amended paragraph:

[0121] HP46/SQ, which contains the porcine A1 domain and human A2, *ap*-A3, C1 and C2 domains and the human S F S Q N P P V L K R H Q R (SEQ ID NO:~~119~~) linker sequence (FIG. 2), was prepared by SOE mutagenesis. P/OL in ReNeo and HSQ in ReNeo were used as templates in the first round SOE reactions. The 5' primer in the P/OL reaction was complementary to ReNeo sequence 5' to the factor VIII cDNA. The 3' primer flanked the porcine A1 domain. The 5' primer in the HSQ reaction was partially complementary to the 3' used in the first reaction. The 3' primer was complementary to human A2 sequence. Following gel purification of the products from the first round reactions, the second SOE reaction was performed, yielding a product containing ReNeo sequence 5' to the factor VIII cDNA insert, the porcine A1 domain, and part of the human A2 domain. This product was digested with *XhoI*, at the junction of ReNeo and the factor VIII insert, and *MluI*, in the human A2 domain, and ligated into *XhoI/MluI* digested HSQ/ReNeo. The resulting plasmid was amplified by transformation into *E. coli* XL-1 Blue cells as described above.